AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application:

Listing of Claims:

1.(Canceled)

2.(Currently Amended)   The method of ~~claim 1~~ claim 3 wherein in the at least one designated frame, a mutually exclusive second portion L-D of the L bits of the index are available to search the codebook.

3.(Currently Amended)   ~~The method of claim 1~~ A method comprising:
    storing in a computer readable medium a codebook comprising N codewords, each uniquely identifiable by a codeword index defining L bits;
    using a designated codeword of the codebook in a first frame to identify a stream of in-band data comprising at least one designated frame apart from the first frame in which in-band data is carried; and
    in the at least one designated frame, using a first portion D of the L bits of a codeword index to carry in-band data;
wherein N and L are integers greater than one, and D is an integer at least equal to one, and wherein the designated codeword is a start codeword, and the at least one designated frame is subsequent to the first frame.

4.(Original)   The method of claim 3 wherein the codebook defines at least one stop codeword, the method further comprising using the designated stop codeword in a frame subsequent to the at least one designated frame to terminate the stream of in-band data.

5.(Original)   The method of claim 4 wherein the designated codeword identifies a start to a continuous stream of in-band data, and using the designated stop codeword terminates the continuous stream of in-band data.

6.(Currently Amended)   ~~The method of claim 1~~ A method comprising:
        storing in a computer readable medium a codebook comprising N codewords, each uniquely identifiable by a codeword index defining L bits;
        using a designated codeword of the codebook in a first frame to identify a stream of in-band data comprising at least one designated frame apart from the first frame in which in-band data is carried; and
        in the at least one designated frame, using a first portion D of the L bits of a codeword index to carry in-band data;
wherein N and L are integers greater than one, and D is an integer at least equal to one;
wherein using a~the designated codeword comprises using a first designated codeword in a~the first frame to select a first data transmission rate within a first stream, the method further comprising using a second designated codeword in a second frame subsequent to the at least one designated frame in the first stream to select a second data transmission rate and to identify a second stream of in-band data.

7.(Currently Amended)   The method of claim 6 wherein the first designated codeword selects a~the first data transmission rate and a first effective codebook size for the first stream, and the second designated codeword selects a~the second data transmission rate and a second effective codebook size for the second stream, wherein the first data transmission rate is one of greater than and less than the second data transmission rate and the first effective codebook size is the other of greater than and less than the second effective codebook size.

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8.(Original)   The method of claim 7 wherein the first data transmission rate is less than the second data transmission rate.

9.(Currently Amended)   The method of claim 6 wherein the first designated codeword is selected from among a first group of designated codewords that each select a the first data transmission rate and the second designated codeword is selected from among a second group of designated codewords that each select a the second data transmission rate that differs from the first data transmission rate.

10.(Original)   The method of claim 9 wherein each codeword of the first group selects an identical first combination of data transmission rate and effective codebook size, and each codeword of the second group selects an identical second combination of data transmission rate and effective codebook size that differs from the first combination.

11.(Original)   The method of claim 10 wherein the codewords of the first and second group are start codewords, the method further comprising using one of a group of designated stop codewords in a frame subsequent to the at least one designated frame to terminate the stream of in-band data.

12.(Original)   The method of claim 10 wherein the number of codewords in the first and second group are identical.

13.(Currently Amended)   The method of claim 1 claim 3 further comprising:
in at least one frame that is not a designated frame, using all of the L bits to uniquely select a codeword from among all codewords in the codebook except designated codewords that identify one of a start and stop of a stream of in-band data.

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14.(Currently Amended)   The method of ~~claim 1~~ claim 3 wherein the designated codeword identifies a stream of in-band data comprising a plurality of designated frames.

15.(Original)   The method of claim 14 wherein each of the plurality of designated frames are dispersed among K non-designated frames that do not carry in-band data, K being an integer greater than one.

16.(Original)   The method of claim 14 wherein the plurality of designated frames is a fixed number of frames, said fixed number one of a predetermined number that is constant for all designated codewords that identify a start of a stream of in-band data, and a number that varies among at least two designated codewords that identify a start of a stream of in-band data.

17.(Canceled)

18.(Currently Amended)   The ~~transmitter of claim 17~~device of claim 19 wherein, in the at least one designated frame, a mutually exclusive second portion L-D of the L bits of the index are available for the encoder to search the codebook.

19.(Currently Amended)   ~~The transmitter of claim 17~~ A device comprising:
        a computer readable medium storing a codebook of 2^L codewords, each codeword uniquely identifiable over other codewords in the codebook by a codeword index defining L bits; and
        an encoder adapted to encode speech into frames using the codebook,
the device adapted to dispose a designated codeword in a first frame to identify a stream of in-band data defined by at least one designated frame in which speech and data are carried, wherein, in the designated frame, the encoder is adapted to encode data using a first portion D of the L bits of a codeword index;

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wherein L is an integer greater than one and D is an integer at least equal to one and wherein the designated codeword is a start codeword, and the at least one designated frame is subsequent to the first frame.

20.(Currently Amended)   The ~~transmitter~~ device of claim 19 wherein the codebook defines at least one stop codeword, and the encoder uses the stop codeword to identify an end of the stream of in-band data.

21.(Currently Amended)   ~~The transmitter of claim 17~~ A device comprising:

a computer readable medium storing a codebook of 2^L codewords, each codeword uniquely identifiable over other codewords in the codebook by a codeword index defining L bits; and

an encoder adapted to encode speech into frames using the codebook,

the device adapted to dispose a designated codeword in a first frame to identify a stream of in-band data defined by at least one designated frame in which speech and data are carried, wherein, in the designated frame, the encoder encodes data using a first portion D of the L bits of a codeword index;

wherein L is an integer greater than one and D is an integer at least equal to one and wherein the encoder is adapted to encode ~~encodes~~ a first designated codeword in the first frame to select a first combination of data transmission rate and effective codebook size within a first stream of in-band data, and the encoder is further adapted to encode ~~encodes~~ a second designated codeword in a second frame subsequent to the at least one designated frame in the first stream to select a second combination of data transmission rate and effective codebook size within a second stream of in-band data.

22.(Currently Amended)   The ~~transmitter~~ device of claim 21 wherein the first designated codeword selects a first value for D, and the second codeword determines a second value for D.

23.(Currently Amended)   The ~~transmitter~~ device of claim 21 wherein the first designated codeword is selected from among a first group of designated codewords that each select a first data transmission rate and the second designated codeword is selected from among a second group of designated codewords that each select a second data transmission rate that differs from the first data transmission rate.

24.(Currently Amended)   The ~~transmitter~~ device of claim 23 wherein each codeword of the first group selects an identical first combination of data transmission rate and effective codebook size, and each codeword of the second group selects an identical second combination of data transmission rate and effective codebook size that differs from the first combination.

25.(Currently Amended)   The ~~transmitter~~ device of claim 24 wherein the codewords of the first and second group are start codewords, wherein the encoder uses one of a group of designated stop codewords in a frame subsequent to the at least one designated frame to terminate the stream of in-band data.

26.(Currently Amended)   The ~~transmitter~~ device of claim 24 wherein the number of codewords in the first and second group are identical.

27.(Currently Amended)   The ~~transmitter of claim 17~~ device of claim 19 wherein ~~the improvement further comprises:~~

in at least one frame that is not a designated frame, the encoder ~~using~~ uses all of the L bits to uniquely select a codeword from among all codewords in the ~~codebook,~~ codebook except designated codewords that identify one of a start and a stop of a stream of in-band data.

28.(Currently Amended)   The ~~transmitter of claim 17~~ device of claim 19 wherein the stream

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of in-band data is defined by a plurality of designated frames that are each dispersed among K non-designated frames that do not carry in-band data, K being an integer greater than one.

29.(Currently Amended)   The ~~transmitter of claim 17~~ device of claim 19, wherein the device is within a mobile station.

30.(Canceled)

31.(Currently Amended)   The ~~receiver of claim 30~~ apparatus of claim 32, wherein, in the at least one designated frame, a mutually exclusive second portion L-D of the L bits of the index are available to the decoder to search the codebook.

32.(Currently Amended)   ~~The receiver of claim 30~~ An apparatus comprising:
        a computer readable medium storing a codebook of 2^L codewords, each codeword uniquely identifiable over other codewords in the codebook by a codeword index defining L bits; and
        a decoder adapted to use the codebook to decode speech, and to decode a designated codeword in a first frame that identifies an in-band stream of data defined by at least one designated frame in which speech and data are carried, wherein, in the designated frame, the decoder is adapted to decode data using a first portion D of the L bits of a codeword index, wherein L is an integer greater than one and D is an integer at least equal to one, and wherein the designated codeword is a start codeword, and the at least one designated frame is subsequent to the first frame.

33.(Currently Amended)   The ~~receiver~~ apparatus of claim 32 wherein the codebook defines at least one stop codeword, and the decoder uses the stop codeword to identify an end to the stream of in-band data.

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34.(Currently Amended)   ~~The receiver of claim 30~~ An apparatus comprising:

a computer readable medium storing a codebook of 2^L codewords, each codeword uniquely identifiable over other codewords in the codebook by a codeword index defining L bits; and

a decoder adapted to use the codebook to decode speech, and to decode a designated codeword in a first frame that identifies an in-band stream of data defined by at least one designated frame in which speech and data are carried, wherein, in the designated frame, the decoder is adapted to decode data using a first portion D of the L bits of a codeword index, wherein L is an integer greater than one and D is an integer at least equal to one, and wherein the decoder decodes a first designated codeword in the first frame to select a first combination of data transmission rate and effective codebook size within a first stream of in-band data, and the decoder decodes a second designated codeword in a second frame to select a second combination of data transmission rate and effective codebook size within a second stream of in-band data.

35.(Currently Amended)   The ~~receiver of claim 30~~ apparatus of claim 32, wherein the designated frames are not consecutive.

36.(Currently Amended)   The ~~receiver of claim 30~~ apparatus of claim 32, wherein the apparatus is disposed within a mobile station.